

REMARKS

Claims 1-20 and 22 are in the application.

Comments on Examiner's Responses to Arguments

In the Office Action, the Examiner notes that the Applicants' arguments filed on February 7, 2005 were not persuasive on the issue that both U.S. Patent 6, 601,101 to Lee, *et al.*, (hereinafter "Lee") and U.S. Patent 4,527,267 to Cohen (hereinafter "Cohen") are silent with regards to wireless paths. Specifically, the Examiner claims that Lee discloses "transparent access" technology for wireless systems which clearly anticipates wireless paths.

Lee at column 1, lines 43-58, at best, merely mentions that "transparency technology also may facilitate the development of wireless systems." However, Lee fails to further teach or suggest exactly how transparency technology may be used and certainly not in the specific way the Applicants have set forth in the claims.

Claim Objections

In the Office Action, the Examiner had objected to claims 2, 3, 5 and 11-22 because of various informalities.

First, with regards to claims 2, 3, 5 and 11-21, it is not clear in the Office Action what changes need to be done. The changes suggested by the Examiner for these claims do not actually request any change in the text of the claims. The Applicants assume that the Examiner meant to reassert the changes suggested in the previous Office Action mailed on October 4, 2004. If this is the case, the Applicants respectfully believe that these changes are not necessary and respectfully direct the Examiner's attention to the Applicants' arguments filed on February 7, 2004 as to why these changes are not necessary. Specifically, each claim stands and falls on its own independent of the other claims. Moreover, it is appropriate to use the article "A" in the claim as opposed to the article "The" as a lead-in for dependent claims. See the MPEP §§ 608.01(n)(I)(A) and 2173.05(f). If additional changes are necessary, the Applicants respectfully request that the Examiner clearly state what the problems are.

The Applicants have amended claim 22 to change the word "As" to "A".

The Applicants respectfully believe that for reasons set forth above, the above objections to claims 2, 3, 5 and 11-22 should be withdrawn.

§ 112 Rejections

In the Office Action, claims 1, 3, 21 and 22 were rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter the Applicants regard as the invention. Specifically, the Examiner notes that the claims recite “the connection” and that it may not be clear as whether it is referring to the said single connection governed by TCP protocols or some other connection.

The Applicants respectfully submit that the above claims are particular and distinct with respect to “the connection” because there is only one connection recited in the claim (i.e., the single connection governed by TCP protocols). Therefore the phrase “the connection” must refer back to the only recited connection. Regardless, for clarity, the Applicants have added the words “governed by TCP protocol” after the words “the connection” in claims 1 and 3.

§ 103 Rejections

In the Office Action, claims 1, 2 and 4-20 were rejected under 35 U.S.C. § 103 as being unpatentable over Lee and Cohen in view of U.S. Patent 6,473,411 to Kumaki, *et al.*, hereafter “Kumaki.”

Representative claim 1 recites:

1. In a system for interconnecting an end user machine with a server for the transmission of data:
 - first and second base stations connected to the server;
 - a subscriber unit connected to the end user machine and normally using a first wireless path with the first base station, the subscriber unit using a second wireless transmission path with the second base station when handed off from the first station to the second base station;
 - means associated with the subscriber unit for initiating a first control signal signifying the start of a handoff and a second control signal signifying the completion of the handoff;
 - means for establishing a single connection governed by TCP protocols between the end user machine and the server, the receiving of data packets from the server by the end user machine causing the generation of first actual acknowledgment signals each of which contains a first portion indicative of a

packet received by the end user machine and a second portion indicative of the size of a receiving window of the end user machine;

first intercepting means associated with the first base station for intercepting one or more successive first actual acknowledgment signals; means coupled to the first intercepting means and responsive to the first control signal for *generating a first simulated acknowledgment signal* whose first portion matches that of an intercepted first actual acknowledgment signal and *whose second portion contains a value that indicates data transfer on the connection governed by TCP protocols is paused*; and

means for applying the first simulated acknowledgment signal to the server.

Applicants respectfully submit that Lee, Cohen and Kumaki, taken either singly or in combination fail to disclose the Applicants' claimed "*generating a first simulated acknowledgment signal... whose second portion contains a value that indicates data transfer on the connection governed by TCP protocols is paused.*"

In the Office Action, the Examiner notes that Lee and Cohen fail to disclose this. The Applicants agree. The Examiner, however, seems to be of the mind that Kumaki discloses this at column 54, lines 10-50. The Applicants respectfully disagree.

In the cited section, Kumaki merely describes a technique for pausing the transmission of Internet Protocol (IP) packets during handoff using a pause state that causes the packets to be queued during handoff rather than transmitted or discarded. When the handoff completes, transmission of the IP packets resumes. Specifically, at the time of handoff, an Address Resolution Protocol (ARP) table entry associated with the IP packets is placed in a pause state. This causes the IP packets to be queued in an internal queue but the TCP connection is not paused. When the handoff is complete, the ARP table entry is changed from the pause state, the IP packets are removed from the queue and the packets are transmitted. To avoid influencing the operation of TCP, Kumaki notes that in addition to the above, the TCP window size may be adjusted to lower the transfer rate at the transmitting side.

The Applicants' claimed invention, on the other hand, involves (1) intercepting acknowledgment signals sent in response to a series of packets received over a TCP connection and (2) replacing the intercepted acknowledgment signals with simulated acknowledgment signals during a handoff. Specifically, when a handoff occurs, a simulated acknowledgment signal containing a value that indicates data transfer on a TCP connection is paused is generated

and sent in its place. Sending the simulated acknowledgment signal causes data transfer on the TCP connection to be paused at the opposite end of the connection. Thus, data transfer over the connection stops. When the handoff completes, the intercepted acknowledgment signal is then sent to resume the transmission of packets on the TCP connection. Nowhere does Lee, Cohen or Kumaki teach or suggest generating or sending a simulated acknowledgment signal to the other end of a connection containing an indication to pause transmission over the connection. In fact, none of the cited references teach or suggest generating and sending a simulated acknowledgment signal to pause a connection. Moreover, these references certainly do not teach a simulated acknowledgment signal that contains an indication to pause a connection.

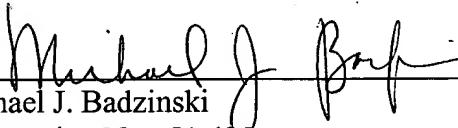
Because of the absence of “*generating a first simulated acknowledgment signal... whose second portion contains a value that indicates data transfer on the connection governed by TCP protocols is paused*” in Lee, Cohen or Kumaki, the Applicants respectfully believe claims 1, 2 and 4-20 are not obvious under 35 U.S.C. § 103, and therefore respectfully request that the above rejections of these claims be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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